

MSHA Notice to Interested Parties

On July, 31, 2007, MSHA will have testing conducted at the Touchstone Research Laboratory on bolts obtained by MSHA during the investigation of the April 18, 2007 fatal accident at United-Mine in Eveleth, MN. The subject bolts were part of the stabilizer system on an Atlas Copco PV351 drill that tipped over resulting in the death of the drill operator. These tests will be conducted in accordance with the metallurgical testing protocol provided below.

At 9:00 a.m. on July 31, 2007, MSHA and Touchstone Research Laboratory personnel will conduct a briefing at the Touchstone Research Laboratory detailing the activities that will take place. The bolts will be photographed and prepared for testing. Interested parties attending will be given the opportunity to view the subject bolts prior to testing from 9:30 a.m. to 10:00 a.m. The testing will begin at 10:00 a.m.. Representatives are welcome to attend these events. Due to limited space in the laboratory, however, the number of persons observing the testing is limited to three representatives for each non-governmental entity. No access to the bolts will be permitted during the testing itself due to safety considerations. MSHA will video tape the testing and also take still photos of all the bolts and associated test specimens. Please contact Ron Medina at 304-547-2059 and advise him who will attend on your behalf. The Touchstone Research Laboratory is located in the Millennium Center, Triadelphia, West Virginia, 26059, on RR 1, Box 100B, just east of Wheeling, West Virginia. Driving instructions to the lab are shown on the Touchstone web site: <http://www.trl.com/contact.html>.

During the testing, MSHA and Touchstone Research personnel will only share information related to the testing plan procedures and will only reveal non-deliberative factual information pertinent to understanding the testing procedures. Test results will not be discussed nor will draft reports of agency conclusions be shared with any non-governmental entity. If you have any questions or comments about the procedures, contact Ron Medina at 304-547-2059.

Testing Protocol

- Macrophotographs of all specimens (eight bolts total; four failed bolts and four intact bolts) and evaluation of four fracture surfaces to determine the cause of the bolt failure. (All parties may be present during the visual examination).
- Scanning Electron Microscope (SEM) evaluation of the one, sudden fracture surface. The two matching sides of this fracture surface are found on the specimens identified as: a) bolt X5; and b) the piece of bolt stud still threaded into specimen identified as nut B). This requires cutting about 1/4 –inch from the broken end. (All parties may be present during the SEM evaluation).
- Hardness determination on all smooth shank areas to correlate to tensile strength for the four failed bolts. (No outside parties will be present).
- Elemental composition of the four failed bolts. Requires drilling a small hole at the hex head end . (No outside parties will be present).
- Microstructure to confirm heat treat condition for the four failed bolts. Requires a small piece cut from the hex head end. (No outside parties will be present).
- Evaluation of the other four intact bolts to determine whether early stage cracks are present. Requires only degreasing and visual inspection. (No outside parties will be present).